



Your ref : 308368GB/PDJ  
 Application No: GB0507737.5  
 Applicant : Honda Motor Co.,Ltd  
 Latest date for reply: 13 October 2005

Examiner : Matthew Lawson  
 Tel : 01633 813530  
 Date of report : 13 June 2005  
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**Patents Act 1977**  
**Examination Report under Section 18(3)**

**Basis of the examination**

1. I have examined your application in the form that it was printed by WIPO when it was in the international phase.

**Novelty / Inventive step**

2. JP 2000-38653 discloses casting dies which have Ti-Cr-Al nitride surface film that has a compressive stress in the range 0.5-8 GPa. The die may be made of steel. Paragraphs [0047], [0048] & [0057] disclose polishing and setting the surface roughness (Ra) of these dies to 0.3 microns or less. It would appear that claims 1-4, 6-8 & 10 are obvious, if not actually anticipated by this document.

3. JP 11-197762 discloses steel casting dies which have a Ti-Al nitride surface layer that has a compressive stress in the range 0.2-1.5 GPa. The example of paragraph [0032] was polished to give a surface roughness (Rz) of 0.5 mm or less before being nitrided. It would appear that claims 1-4, 6, 7 & 10 are obvious, if not actually anticipated by this document.

4. It is considered obvious to combine what is taught in each of JP 2002-60845, JP 2000-38653, JP 11-197762 & JP 11-152583 (casting dies made from steel which have a compressive stress of at least 1000 MPa and are provided with a nitrided layer) with what is taught in JP 2001-11599 (casting dies made from steel which have a maximum surface roughness and are provided with a nitrided layer). As a consequence it would appear that claims 1-4, 6-8 & 10 lack any inventive step.

5. Three copies of each of JP 2002-60845, JP 2001-11599, JP 2000-38653, JP 11-197762 & JP 11-152583 have been enclosed for your information.

**Conflict with a corresponding PCT patent application**

6. This application appears to be similar to your international patent application published under number WO 2004/039517, having the same priority date and designating GB (European Patent). If patents granted on these two applications relate to the same



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[Examination Report contd.]

invention, the Comptroller will in due course revoke the patent granted on the present application unless either you amend the present specification to remove the conflict or, before the date of grant of the present application under Section 25(1), you begin proceedings to surrender the European patent(UK). Of course if the GB designation is withdrawn before the grant of the European patent, no action will be required under Section 73(2).

**Other matters**

7. It is not clear whether the specified compressive residual stress and maximum Ry height of claim 1 relate to the surface of the steel or to the nitrided layer. Amendment (which has support in the description) at least comment is required regarding this matter. Similar amendment/comment is required with regard to the Vickers hardness of claims 2 & 3 and the stress & Ry value of claims 4, 6 & 8.